



03500.017494.

PATENT APPLICATION

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
KOICHI SUZUKI, ET AL. ) Examiner: Not Yet Assigned  
Application No.: 10/525,327 ) Group Art Unit: 1773  
Filed: February 22, 2005 )  
For: SPIRO COMPOUND AND )  
ORGANIC LUMINESCENCE )  
DEVICE USING THE SAME ) October 3, 2005

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and in accordance with the practice under 37 C.F.R. §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed Form PTO-1449. Copies of the listed foreign documents are also enclosed.

The concise explanation of relevance for the non-English documents is found in the specification where cited, in an attached abstract and/or in a corresponding U.S. Patent document.

The Examiner's attention is also directed to the following U.S. Application:

<u>APPLICATION NO.</u>	<u>FILING DATE</u>	<u>GROUP ART UNIT</u>
11/102,668	April 11, 2005	1621

It is respectfully requested that the above information be considered by the Examiner and that a copy of the enclosed Form PTO-1449 be returned indicating that such information has been considered.

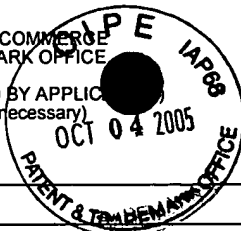
Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,



Peter Saxon  
Attorney for Applicants  
Registration No.: 24,947

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Facsimile: (212) 218-2200

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT  
(Use several sheets if necessary)ATTY DOCKET NO.  
**03500.017494**APPLICATION NO. **10/525,327**

APPLICANT

**KOICHI SAKI ET AL**

FILING DATE

**February 22, 2005**

GROUP

**1773**

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER1	DATE	NAME	CLASS	SUBCLASS	TRANSLATION
		<b>4539507</b>	<b>9/1985</b>	<b>Van Slyke, et al.</b>	<b>313</b>	<b>504</b>	
		<b>4720432</b>	<b>1/1988</b>	<b>Van Slyke, et al</b>	<b>428</b>	<b>457</b>	
		<b>4885211</b>	<b>12/1989</b>	<b>Tang, et al</b>	<b>428</b>	<b>457</b>	
		<b>5130603</b>	<b>7/1992</b>	<b>Tokailin, et al</b>	<b>313</b>	<b>504</b>	
		<b>5151629</b>	<b>9/1992</b>	<b>Van Slyke</b>	<b>313</b>	<b>504</b>	
		<b>5227252</b>	<b>7/1993</b>	<b>Murayama, et al</b>	<b>428</b>	<b>690</b>	
		<b>5247190</b>	<b>9/1993</b>	<b>Friend, et al</b>	<b>257</b>	<b>40</b>	
		<b>5317169</b>	<b>5/1994</b>	<b>Nakano, et al</b>	<b>257</b>	<b>40</b>	
		<b>5382477</b>	<b>1/1995</b>	<b>Saito, et al</b>	<b>428</b>	<b>690</b>	

## FOREIGN PATENT DOCUMENTS

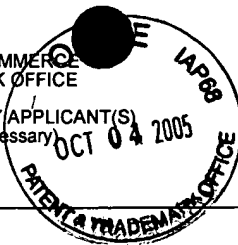
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO/ OR ABSTRACT
	<b>JP</b>	<b>02-247278</b>	<b>10/1990</b>	<b>JAPAN</b>	<b>ABST</b>	<b>USP</b>	<b>6093864 5130603</b>
	<b>JP</b>	<b>03-255190</b>	<b>11/1991</b>	<b>JAPAN</b>	<b>ABST</b>	<b>USP</b>	<b>5227252</b>
	<b>JP</b>	<b>04-145192</b>	<b>5/1992</b>	<b>JAPAN</b>	<b>ABST</b>	<b>USP</b>	<b>5317169 5726457</b>
	<b>JP</b>	<b>05-202356</b>	<b>8/1993</b>	<b>JAPAN</b>	<b>ABST</b>	<b>USP</b>	<b>ABSTRACT</b>
	<b>JP</b>	<b>05-247460</b>	<b>9/1993</b>	<b>JAPAN</b>	<b>ABST</b>	<b>USP</b>	<b>ABSTRACT</b>
	<b>JP</b>	<b>07-278537</b>	<b>10/1995</b>	<b>JAPAN</b>			<b>ABST &amp; USP5840217</b>
	<b>JP</b>	<b>09-202878</b>	<b>8/1997</b>	<b>JAPAN</b>			<b>ABSTRACT</b>
	<b>JP</b>	<b>09-227576</b>	<b>9/1997</b>	<b>JAPAN</b>			<b>ABSTRACT</b>

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

		<b>Yamamoto, et al; "A Novel Type of Polycondensation Utilizing Transition Metal-Catalyzed C-C Coupling"; Bulletin of The Chemical Society of Japan; vol 51; No. 7; pp 2091-2097 (1978)</b>
		<b>Ghosal, et al; "Formation of 1,3-Dienes, and Biphenyls via the copper (II) Nitrate Mediated Coupling of Organotin compounds"; J. Org. Chem., Vol.52, No. 19, pp. 4296-4298 (1987)</b>
		<b>Tang, et al; "Organic Electroluminescent diodes"; Appl. Phys. Lett. 51 (12) 913-915 (1987)</b>

EXAMINER

DATE CONSIDERED

FORM PTO 1449 (modified)				ATTY DOCKET NO. <b>03500.017494</b>		APPLICATION NO. <b>10/525,327</b>	
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE				APPLICANT <b>KOICHI SUZUKI ET AL</b>			
LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)				FILING DATE <b>February 22, 2005</b>		GROUP <b>1773</b>	
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER1	DATE	NAME	CLASS	SUBCLASS	TRANSLATION
		<b>5409783</b>	<b>4/1995</b>	<b>Tang, et al</b>	<b>428</b>	<b>690</b>	
		<b>5514878</b>	<b>5/1996</b>	<b>Holmes, et al</b>	<b>257</b>	<b>40</b>	
		<b>5672678</b>	<b>9/1997</b>	<b>Holmes, et al</b>	<b>528</b>	<b>373</b>	
		<b>5726457</b>	<b>3/1998</b>	<b>Nakano, et al</b>	<b>257</b>	<b>40</b>	
		<b>5840217</b>	<b>11/1998</b>	<b>Zupo, et al</b>	<b>252</b>	<b>583</b>	
		<b>6093864</b>	<b>7/2000</b>	<b>Tokailin, et al</b>	<b>585</b>	<b>25</b>	
		<b>6652997</b>	<b>11/2003</b>	<b>Suzuki, et al</b>	<b>428</b>	<b>690</b>	
		<b>6916555</b>	<b>7/2005</b>	<b>Suzuki, et al</b>	<b>428</b>	<b>690</b>	<b>3/12/2003</b>
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	TRANSLATION YES/NO/ OR ABSTRACT
		<b>2004-253389</b>	<b>12/2004</b>	<b>Suzuki, et al</b>	<b>428</b>	<b>1.1</b>	<b>8/12/03</b>
		<b>2004-263067</b>	<b>12/2004</b>	<b>Saitoh, et al</b>	<b>313</b>	<b>504</b>	<b>6/25/04</b>
		<b>2004-265632</b>	<b>12/2004</b>	<b>Okinaka, et al</b>	<b>428</b>	<b>690</b>	<b>6/25/04</b>
		<b>2005-166414</b>	<b>5/2005</b>	<b>Saitoh, et al</b>	<b>428</b>	<b>690</b>	<b>3/25/03</b>
		<b>2003-235713</b>	<b>12/2003</b>	<b>Suzuki, et al</b>	<b>428</b>	<b>690</b>	
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
		<b>Ari Auram, "Molecule for memory, Logic, and Amplification"; J. Am. Chem. Soc. 110(17) 5687-5692 (1998)</b>					
		<b>Burroughes, et al; "Light-emitting diodes based on Conjugated polymers"; Nature, 347, 539-541 (1990)</b>					
		<b>Miyaura, et al; "Palladium-Catalyzed Cross-Coupling Reactions of Organoboron Compounds, Chem. Rev. 95, (7), 2457-2483 (1995)</b>					
		<b>Wu, et al; "Convergent Synthetic Routes to Orthogonally Fused Conjugated Oligomers Directed toward Molecular Scale Electronic Device Applications"; J. Org. Chem. 61 (20) 6906-6921 (1996)</b>					
		<b>Baldo, et al; Highly efficient phosphorescent emission from organic electroluminescent devices"; Nature, 395 (6698) 151-154 (1998)</b>					
EXAMINER				DATE CONSIDERED			